

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A system for dynamically pricing a product, the system comprising:

means for collecting and storing data on past and current sales;

means for forecasting normalized future sales volume based upon the past sales data;

means for forecasting normalized future sales volume based upon the past sales data;

means for determining price sensitivity of consumers to changes in price of the product based upon past data, wherein the mean for determining price sensitivity uses a logistic mathematical model that comprises a price sensitivity function:

$$F_{PS}(P) = 0.2 * \{1 - [\text{ArcTan}(\alpha * (P_{\text{final}} - P_{\text{REF}})) * 2/\pi]\},$$

wherein

P<sub>ref</sub> is a reference price P<sub>ref</sub>,

P<sub>final</sub> is final price, and

α is empirically determined according to the past and current sales data;

means for forecasting future sales volume at different prices by adjusting the normalized future sales volume forecast by the price sensitivity;

means for accepting user input to define for one or more strategic objectives;

means for determining [[a first]] an optimal price according to the strategic objectives using the future sales volume forecast and costs for the product; and

means for evaluating the current sales at the [[first]] optimal price and for using the evaluation to modify the optimal price [[determine a second optimal price in real time]] according to the strategic objectives.

2. (original) The system of claim 1 further comprising means for classifying the past sales into one or more channel segments, whereby each of the past sales is classified into only one channel segment.
3. (cancelled)
4. (original) The system of claim 2, wherein the costs for the product include a different channel segment cost in each of the channel segments.
5. (cancelled)
6. (previously presented) The system of claim 1, wherein one of said strategic objectives is a minimum price for the product.
7. (previously presented) The system of claim 1, wherein one of said strategic objectives is a maximum price for the product.
8. (previously presented) The system of claim 1, wherein one of said strategic objectives is a minimum sales volume for the product.
9. (previously presented) The system of claim 1, wherein one of said strategic objectives is a maximum sales volume for the product.

10. (original) The system of claim 1 further comprising a means for forecasting a response of a competitor to a change in the price of the product by the seller, whereby the means for forecasting future sales volume at different prices accounts for the competitor's response.
11. (previously presented) The system of claim 1 further comprising a means for determining lost sales data, whereby the means for forecasting future sales volume at different prices accounts for the competitor's response.
12. (original) The system of claim 1 further comprising a means for alerting the seller of an occurrence of a pre-specified event.
13. (original) The system of claim 12, wherein the means for alerting the seller compares prices for actual sales to the optimal price, and the pre-specified event is a difference between the actual sales and the optimal price.
14. (original) The system of claim 12, wherein the means for alerting the seller compares actual sales at the optimal price to the forecasted sales volumes at the optimal price.
15. (original) The system of claim 14, wherein the pre-specified event occurs when a ratio of actual sales volume to the forecasted sales volume is less than a first pre-specified amount.
16. (original) The system of claim 14, wherein the pre-specified event occurs when the forecasted sales volume exceeds the actual sales volume by more than a second pre-specified amount.

17. (Cancelled)

18. (currently amended) A method of dynamically pricing a product, the method comprising the steps of:
- accepting and storing one or more strategic objectives from a seller[[.]];
  - collecting data on past sales;
  - forecasting normalized future sales volume based upon the past sales data;
  - determining price sensitivity of consumers to changes in price of the product based upon the past sales data, wherein the step of determining price sensitivity uses a logistic mathematical model that comprises a price sensitivity function:

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$$F_{PS}(P) = 0.2 * \{1 - [\text{ArcTan}(\alpha * (P_{\text{final}} - P_{\text{REF}})) * 2/\pi]\},$$

wherein

P<sub>ref</sub> is a reference price P<sub>ref</sub>,

P<sub>final</sub> is final price, and

α is empirically determined according to the past and current sales data;

forecasting future sales volume at different prices by adjusting the normalized future sales volume forecast by the price sensitivity;

determining an [[a first]] optimal price according to the strategic objectives using the future sales volume forecast and costs for the product ;

selling the product at the [[first]] optimal price;

collecting current sales data on sales of the product at the [[first]] optimal price in real time;

repeating in real time said steps of forecasting normalized future sales volume, determining price sensitivity of consumers, and forecasting future sales volume at different prices using said past and current sales data; and

updating the [[determining in real time a second]] optimal price according to the strategic objectives using the future sales volume forecast for past and current sales and costs for the product.

19. (original) The method of claim 18 further comprising the step of dynamically determining the costs for the product.
20. (original) The method of claim 18 further comprising the step of classifying the past sales into different channel segments, wherein each of the past sales is classified into only one of the channel segments and wherein the step of forecasting future sales at different prices further comprises forecasting future sales in each of the channel segments.
21. (original) The method of claim 20, wherein the costs for the product include a different channel segment cost for each of the channel segments.
22. (original) The method of claim 20, wherein the step of determining an optimal price is performed for each of the channel segments.
23. (cancelled).
24. (cancelled).

25. (previously presented) The method of claim 18, wherein one of said strategic objectives is a minimum price for the product.
26. (previously presented) The method of claim 18, wherein one of said strategic objectives is a maximum price for the product.
27. (previously presented) The method of claim 18, wherein one of said strategic objectives is a minimum sales volume for the product.
28. (previously presented) The method of claim 18, wherein one of said strategic objectives is a maximum sales volume for the product.
29. (original) The method of claim 18, wherein the step of forecasting future sales volume further accounts for inventory of the product.
30. (original) The method of claim 29, wherein the inventory accounts for the forecasted sales for the product at the optimal price.
31. (original) The method of claim 18, wherein the step of forecasting future sales volume further accounts for an expected response of a competitor.
32. (original) The method of claim 18, wherein the step of forecasting future sales volume further accounts for lost sales data.
33. (original) The method of claim 18, further comprising the step of comparing actual sales at the optimal price to forecasted sales volumes at the optimal price.

- 34. (original) The method of claim 33 further comprising the step of adjusting the optimal price to account for actual sales.
- 35. (original) The method of claim 33 further comprising the step of alerting the seller when the ratio of actual sales volume to forecasted sales volume at the optimal price is less than a first pre-specified amount.
- 36. (original) The method of claim 33 further comprising the step of alerting the seller when the actual sales volume is less than the forecasted sales volume by more than a second pre-specified amount.
- 37. (original) The method of claim 18, wherein the step of determining an optimal price further comprising accounting for a volume discount for the product.
- 38. (cancelled)
- 39. (original) The method of claim 18, wherein the step of determining price sensitivity further comprises accounting for a relationship between sales of the product and a second product.
- 40. (cancelled).
- 41. (cancelled)
- 42. (cancelled)
- 43. (cancelled)

44. (cancelled)

45. (cancelled)

46. (Cancelled)

47. (currently amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for dynamically determining a price a product, said method steps comprising :  
accepting and storing one or more strategic objectives[[,]];  
collecting data on past sales;  
forecasting normalized future sales volume based upon the past sales data;  
determining price sensitivity of consumers to changes in price of the product based upon the past sales data using a price sensitivity function, wherein the method step of determining price sensitivity uses a price sensitivity function:

$$\underline{F_{PS}(P) = 0.2 * \{1 - [\text{ArcTan}(\alpha * (P_{\text{final}} - P_{\text{REF}})) * 2/\text{Pi}]\}},$$

wherein

P<sub>ref</sub> is a reference price P<sub>ref</sub>,

P<sub>final</sub> is final price, and

α is empirically determined according to the past and current sales data;

forecasting future sales volume at different prices by adjusting the normalized future sales volume forecast by the price sensitivity;

determining [[a first]] an optimal price according to the strategic objectives using the future sales volume forecast and costs for the product;



collecting current sales data on the sales of the product at the [[first]] optimal price[[ in real time]];

repeating [[in real time]] said steps of forecasting normalized future sales volume, determining price sensitivity of consumers, and forecasting future sales volume at different prices using said past and current sales data; and

modifying said [[determining in real time a second improved]] optimal price according to the strategic objectives using the future sales volume forecast for past and current sales and costs for the product.

48. (cancelled)

49. (cancelled)

50. (Cancelled)